IN THE SPECIFICATION

1. Please amend paragraphs [0003]-[0010] as follows:

[0003] As computer relevant ~~technologies have~~ technology has rapidly [[been]] progressed, a variety of applications thereof have been developed accordingly. Especially, one of the technical fields showing [[the]] rapid progress is [[a]] the multimedia field, employing Moving Picture Experts Group (MPEG) ~~standar ds~~ standards for compression ~~techniques~~ of moving pictures. As such a multimedia technology has [[been]] developed, the computer has been able to serve as a means for the appreciation of digital music and reception of television (TV) broadcasting based on public networks. In the case of the reception of television signals via a computer, it is advantageous that clear images [[can]] be provided because the number of scanning lines of a monitor of the computer are much [[more]] greater than those of the television screen.

[0004] ~~I have found that there~~ There is a need to receive and record television signals with a computer in conjunction with power saving features, efficiency, and convenience. Efforts have been made in the area of television signals and video signals.

[0005] Exemplars of recent efforts in the art include: Korean Patent First Publication No. 003127/1993 to Sung-Won Cho, entitled *METHOD OF CONTROLLING A VIDEO CASSETTE RECORDER BY USING A COMPUTER CONNECTED TO THE VIDEO CASSETTE RECORDER*, published on 24 February 1993[[,]]; Korean Patent First Publication No. 008138/1997 to Bong-Chul OH, entitled *METHOD OF PROGRAMMING FOR RECORDING A TV BROADCASTING CHANNEL BY USING A COMPUTER*

CONNECTED TO THE TV, published on 24 February 1997[[,]]; Korean Patent First Publication No. 016781/1998 to Yoon-Soo Shin, entitled *METHOD OF PROGRAMMING FOR RECORDING IN A VCR BY USING A COMPUTER CONNECTED TO THE VCR*, published on 5 June 1998[[,]]; Korean Patent First Publication No. 017887/1998 to Ki-Bok Moon, entitled *METHOD OF PROGRAMMING FOR RECORDING IN A PC-VCR*, published on 5 June 1998[[,]]; Korean Patent First Publication No. 041359/1999 to Kyu-Nam Kim, entitled *METHOD OF STORING INFORMATION ABOUT INTERNET SITES*, published on 15 June 1999[[,]]; Korean Patent First Publication No. 004315/2000 to Sham Lee, entitled *METHOD OF CONTROLLING A POWER OF A DIGITAL TELEVISION HAVING A PERSONAL COMPUTER FUNCTION AND A TELEVISION FUNCTION*, published on 25 January 2000[[,]]; Japanese Patent First Publication No. 9-128090 to Sato, entitled *VTR-INCORPORATED PERSONAL COMPUTER*, published on 16 May 1997[[,]]; Japanese Patent First Publication No. 10-177777 to Nakajima, entitled *PROGRAM RESERVATION SYSTEM AND RECORDING MEDIUM*, published on 30 June 1998[[,]]; and Japanese Patent First Publication No. 11-110089 to Kashimoto *et al.*, entitled *COMPUTER SYSTEM AND NETWORK CONTROLLER USED BY SAME COMPUTER SYSTEM*, published on 23 April 1999.

[0006] While these recent efforts provide advantages, ~~I note that~~ they fail to adequately provide a system and method for receiving and recording television signals with a computer, in conjunction with power saving features, efficiency, and convenience.

SUMMARY OF THE INVENTION

[0007] Therefore, the present invention has been [[made]] developed in view of the above shortcomings, and it is an object of the present invention to provide a computer system which is automatically turned on when a television program reserve-recording operation starts, and which is automatically turned off when the ~~rec ording~~ recording operation is finished, thereby saving [[the]] power consumption due to the reserve-recording, and a method for storing television signals therein.

[0008] This and other objects of the present invention may be achieved by [[a]] provision of a computer comprising: a central processing unit (CPU) driving an operating system (OS)~~, further comprising;~~ a television receiver part for receiving external television signals; a storage unit for storing the television signals therein; a reserve-recording set-up part for setting up reserve-recording conditions for the television signals; a record-controlling part for storing the television signals in the storage unit according to the set-up reserve-recording conditions; and a power control part for controlling power supply to allow switching between a normal mode and a power saving mode ~~to be switched therebetween~~, and for switching the power saving mode to the normal mode according to the set-up reserve-recording conditions when the time for reserve-recording approaches, wherein [[a]] power is supplied to the central processing unit under the normal mode whereas [[the]] power is not supplied to the central processing unit under the power saving mode.

[0009] Preferably, the reserve-recording set-up part comprises a password skipping

part for skipping a password when the power saving mode is changed to the normal mode [[where]] and the password is given to the computer system.

[0010] It is also ~~effective~~ preferable that the power control part ~~changes~~ change the power mode of the central processing unit from the normal mode to the power saving mode after reserve-recording conditions are set up through the reserve-recording set-up part[[, the]]. The reserve-recording set-up part further comprises a mode selection window display for selecting the power mode of the central processing unit after the reserve-recording conditions are set up, and the power control part switches the power mode of the central processing unit according to selection of the power mode through the mode selection window display.

2. Please amend paragraphs [0012]-[0019] as follows. The amendments to paragraph [0018] and [0021] previously made in the Amendment filed on 29 December 2003 have been incorporated.

[0012] ~~Effectively~~ Preferably, the power control part switches the power mode of the central processing unit from the power saving mode to the normal mode when [[the]] power is supplied to the computer system by a user [[where]] when the computer system is in the power saving mode, and the reserve-recording part comprises an identification window display for identifying the reserve-recording conditions when the power saving mode of the central processing unit is changed to the normal mode, wherein the identification window display enables withdrawal, change and approval of the set-up

reserve-recording conditions therethrough.

[0013] It is preferable that the storage unit ~~is comprised of~~ comprise any one of a hard disk drive, a recordable compact disk drive, and a recordable digital versatile disk (DVD) drive.

[0014] According to another aspect of the present invention, this and other objects may also be achieved by a provision of a method for storing television signals in a computer comprising a central processing unit, an input unit, a monitor, a readable and writable storage unit and a television receiver part for receiving the television signals and for outputting the television signals to the monitor[[,]]. ~~comprising~~ The method comprises the steps of: setting up reserve-recording conditions to record the television signals received through the receiver part in the storage unit; switching a power mode of the central processing unit from a power saving mode to a normal mode when reserve-recording is initiated according to the set-up reserve-recording conditions, wherein [[a]] power is supplied to the central processing unit under the normal mode whereas the power is not supplied to the central processing unit under the power saving mode; and storing the television signals in the storage unit according to the reserve-recording conditions.

[0015] Preferably, the switching step comprises the [[step]] steps of determining whether a password is given to the computer system[[;]], and ~~the step of~~ skipping the password [[where]] when it is determined that the password is given to the computer system.

[0016] The method according to the present invention further comprises the [[step]] steps of switching the power mode of the central processing unit from the normal mode to the power saving mode after setting up of the reserve-recording conditions is finished, and ~~also the step of~~ displaying a mode selection window display allowing a user to select a power mode of the central processing unit after setting up of the reserve-recording conditions is finished.

[0017] Desirably, the method further comprises the [[step]] steps of switching the power mode of the central processing unit from the normal mode to the power saving mode after reserve-recording of the television signals is finished, and ~~also the step of~~ displaying a mode selection window display allowing a user to select the power mode of the central processing unit after reserve-recording of the television signals is finished.

[0018] The method further comprises the step of switching the power mode of the central processing unit from the power saving mode to the normal mode when the power is supplied to the computer system by a user [[where]] and the computer system is in the power saving mode, and the step of displaying an identification window display for identifying the reserve-recording conditions where the power ~~saving~~ mode of the central processing unit is switched from the power saving mode to the normal mode.

[0019] According to still another aspect of the present invention, this and other objects may also be achieved by [[a]] provision of a method for storing television signals in the computer system, allowing for switching between a normal mode and a power saving mode, ~~to be switched therebetween~~ wherein power is supplied to the central processing

unit under the normal mode whereas power is not supplied to the central processing unit under the power saving mode[[,]]. ~~comprising~~ The method comprises the steps of: setting up reserve-recording conditions such as start time of the reserve-recording of the television signals; identifying whether the power mode of the central processing unit is in the power saving mode when a start time of the reserve-recording approaches; and storing the television signals received from the outside by converting the power saving mode to the normal mode thereof[[, if]] when the power mode of the central processing unit is in the power saving mode.

[0020] Preferably, the method further comprises the [[step]] steps of switching the power mode of the central processing unit from the normal mode to the power saving mode after setting up of the reserve-recording conditions is finished, ~~the step of~~ switching the power mode of the central processing unit from the normal mode to the power saving mode after reserve-recording of the television signals is finished, and ~~the step of~~ switching the power mode of the central processing unit from the power saving mode to the normal mode when [[the]] power is supplied to the computer system by a user [[where]] when the computer system is in the power saving mode.

[0021] To achieve these and other objects in accordance with the principles of the present invention, as embodied and broadly described, the present invention provides a computer apparatus, comprising: a central processing unit driving an operating system; a recording set-up unit for setting recording conditions for recording television signals; a control unit for controlling the recording of the television signals in dependence upon the

recording conditions; a storage unit for storing the television signals; a power control unit for controlling power supplied in a normal mode and in a power saving mode, for automatically switching the power saving mode to the normal mode in dependence upon the recording conditions, [[a]] power being supplied to said central processing unit in the normal mode, [[the]] and power not being supplied to said central processing unit in the power saving mode.

3. Please amend paragraph [0026] as follows:

[0026] Fig. 3 is a view showing a window display for setting up ~~a reserve-recordation~~ reserve-recording of the television program, in accordance with the principles of the present invention;

4. Please amend paragraphs [0030]-[0038] as follows:

[0030] A method of recording a television program on a computer system will be described with respect to Fig. 5. The recording shown in Fig. 5 ~~corresponds to~~ comprises a "reserve-recording" operation. The phrase "reserve-recording" can refer to [[a]] recording of a signal which is set to be performed automatically at a predetermined time. For example, on 25 February 2001, a person can program a video cassette recorder (VCR) to record a television show which is scheduled to be broadcast on television on 27 February 2001. Thus, the phrase "reserve-recording" can ~~correspond to~~ be used to describe a recording operation which is performed automatically, without user

intervention, at a predetermined reserved time.

[0031] In Fig. 5, at step S510, power is supplied to a computer system. At step S520, a reserve-recording set-up program installed in the computer system is executed to allow a user to set up a broadcasting channel to be recorded and a broadcast time thereof. At step S530, [[where]] when the computer system is on at the time of ~~initiating~~ initiation of the reserve-recording, the reserve-recording set-up program is automatically activated. At step S540, received television signals are converted into digital files in a television receiver part ~~into digital files~~. ~~These~~ As an example, these digital files can ~~correspond to~~ comprise video files such as Moving Picture Experts Group (MPEG) files, audio visual interleaved (AVI) files, RealPlayer media (RM) files, or Windows Media Player media (WMV) files~~, for example~~. At step S550, the digital files are stored in a hard disk drive which is a storage unit in the computer system. At step S560, after the recording is finished, the execution of the recording program automatically terminates.

[0032] However, in the television program reserve-recording method of Fig. 5, ~~this method requires~~ it is required that the computer system be powered on prior to the reserve-recording, even [[while]] when the user is not using the computer system. Also, in the method of Fig. 5, the computer system does not turn off after the recording is finished, thereby causing an unnecessary consumption of power.

[0033] Referring to Fig. 1, a computer system of the present invention ~~is comprised of~~ comprises a central processing unit (CPU) 10 driving an operating system (OS) of the computer system, an input unit 20 for inputting external commands into the CPU 10, a

television receiver part 30 for receiving external television signals therein, a monitor 40 for outputting the television signals received in the television receiver part 30, and a hard disk drive 50 serving as a storage unit.

[0034] The CPU 10 is supplied with [[a]] power to drive the operating system of the computer system. The CPU 10 outputs the television signals to the monitor 40 in cooperation with the television receiver part 30 and a recording part 53 to be described later, and stores [[them]] the television signals in the hard disk drive 50 substantially at the same time.

[0035] The hard disk drive 50 ~~is comprised of~~ comprises a recording part 53 which is [[a]] software to receive the television signals, to convert the received television signals into digital files such as MPEG files or AVI files, for example, and to output and record the converted digital files, and a power control part 55 for controlling ~~a power~~ supply of power to the CPU 10 according to reserve-recording conditions of the recording part 53 so as to turn the computer system on or off. The television signals converted into [[the]] digital files through the recording part 53 are stored in the hard disk drive 50.

[0036] The recording part 53 ~~is comprised of~~ comprises a reserve-recording set-up part 60 which is [[a]] software to receive the television signals and to set up the reserve-recording conditions, and a record-controlling part 70 for outputting and recording the received television signals. The reserve-recording set-up part 60 includes a password skipping part 72.

[0037] The reserve-recording set-up part 60 ~~is comprised of~~ comprises a reserve-

recording set-up window display 61 for setting up the reserve-recording conditions, a mode selection window display 80 for selecting a power mode (that is, [[a]] power saving mode or [[a]] normal mode) of the central processing unit after setting up the recording conditions, and an identification window display 63 for identifying the set-up reserve-recording conditions. [[Where]] When the computer system needs to have a password in order to operate [[it]], the password skipping part 72 in the reserve-recording set-up part 60 installs a password skip flag at a password designating point of [[a]] the system basic input output system (BIOS). Accordingly, when the power mode is switched from the power saving mode to the normal mode, the password can be automatically skipped ~~although~~ even though it is established in the system.

[0038] Thus, if a password is required when the computer system goes from power saving mode to normal mode, the password skipping part 72 can enable the present invention to work properly without user intervention~~, because~~ since the password requirement will not impede the process of the present invention. The password skipping part 72 can be set to cause the computer system to go from power saving mode to normal mode without requiring a user to manually enter a password at the moment that the computer system goes from power saving mode to normal mode for the recording of television signals in accordance with the principles of the present invention. Also, the password skipping part 72 can be not set, thus causing the computer system to require that a user manually enter a password at the moment that the computer system goes from power saving mode to normal mode for the recording of television signals. The present

invention can also work without the password skipping part 72[[,]] because some computer systems are configured to not require a password when changing from a power save mode to a normal mode. The password skipping part 72 is a desirable enhancement which adds convenience.

5. Please amend paragraph [0040] as follows:

[0040] The user can select a desired television broadcasting channel and its broadcast time as [[the]] reserve-recording conditions through use of the reserve-recording set-up window display 61. The mode selection window display 80, shown [[up]] along with the reserve-recording set-up window display 61, is used in selecting the power mode of the CPU 10 after the user sets up the reserve-recording conditions. The user can select the power saving mode while he or she is not using the computer after setting up the reserve-recording conditions, and he or she can select the normal mode while he or she continues to use the computer.

6. Please amend paragraphs [0042]-[0056] as follows:

[0042] The record-controlling part 70 receives the television signals through the television receiver part 30, converts them into digital files, such as MPEG files or AVI files, ~~for example,~~ which can be used in the computer system, and outputs them to the monitor 40, and at the same time stores them in the hard disk drive 50. The record-controlling part 70 allows the user to determine whether to continue to use the computer

system or whether to stop ~~to operate it~~ its operation, through the mode selection window display 80, after the recording is finished.

[0043] The power control part 55 is a [[kind]] type of application program for controlling the hardware of the computer system. The power control part 55 controls the [[power]] supply of power to the CPU 10 according to the reserve-recording conditions so that the power mode is automatically changed ~~either~~ to the normal mode [[under]] in which [[the]] power is supplied to the CPU 10, or to the power saving mode [[under]] in which [[the]] power is not supplied to the CPU 10.

[0044] [[Under]] In the normal mode, all of the hardware of the computer system, including the CPU 10, is operated in a normal manner. For example, the process of receiving [[the]] television signals in the television receiver part 30 and storing them in the hard disk drive 50 is performed in the normal mode. However, if the power mode is converted [[into]] to the power saving mode by the power control part 55, all of the jobs done up to that time are saved in the hard disk drive 50, and then the monitor 40, the hard disk drive 50, and the CPU 10 are turned off, and thus the computer system is finally turned off.

[0045] Referring to Fig. 2, the process of receiving [[the]] television signals and storing them in the hard disk drive 50 according to the reserve-recording conditions will be described. A user connects [[a]] power to the computer system so as to activate the reserve-recording set-up part 60, for receiving television signals and storing them in the hard disk drive 50 in the form of a digital file (S10). Subsequently, the reserve-recording

set-up window display 61 ~~is shown up~~ appears as seen in Fig. 3, allowing the user to set up the reserve-recording conditions, and accordingly, the user sets up a television broadcasting program desired for reserve-recording and a broadcast time (S20).

[0046] Once the reserve-recording conditions are set up, the window display shows [[up]] the mode selection window display 80 through which the user is allowed to determine whether to stop using the computer system after setting up the reserve-recording conditions or whether to continue using the computer system (S30). It is then determined whether the power saving mode is selected (S40). If the normal mode is selected, the computer system continues to ~~be operated~~ operate (S90), and then the power control part 55 supplies [[the]] power to the CPU 10 so as to allow the user to use the computer system.

[0047] If the power saving mode is selected, the process of terminating the computer system is conducted (S50). The power control part 55 stores all of the jobs within a memory of the computer system[[,]] in the hard disk drive 50, and then turns off the hard disk drive 50 and the CPU 10 [[off]].

[0048] [[Under]] In the off state of the computer system, if the user connects the power to resume use of the computer system (S60) or if the ~~r eserved~~ reserved broadcast time approaches (S70), the computer system is automatically turned on (S80).

[0049] In [[the]] step S70, the power control part 55 checks the reserve time using a timer (not shown) installed in the computer system, and supplies [[the]] power to the CPU 10 a few minutes before the reserve-recording time starts[[,]] so as to allow the

computer system to be turned on for [[the]] reserve-recording. The power control part 55 determines whether the computer system is turned on by the user at the same time as the system is turned on (S100).

[0050] Where the computer system is not turned on by the user, a determination is made as to whether a password is required (S110). If no password [[was]] is required, step S180 is performed after step S110. If a password is required, then step S130 is performed after step S110. If a password is required and was previously given to the system, the reserve-recording set-up part 60 [[gives]] provides a password skip flag to the system basic input output system (BIOS) so as to skip the password (S130).

[0051] After the record-controlling part 70 in the recorder part 53 is activated ~~depending~~ in dependence upon the reserve-recording conditions set up through the reserve-recording set-up part 60 (S180), it receives the television signals through the television recorder part 30, converts them into digital files employable in the computer system, and outputs them to the monitor 40, [[and]] while at the same time ~~stores~~ storing them in the hard disk drive 50 (S190).

[0052] The recording is finished by the record-controlling part 70 according to the reserve-recording conditions set up through the reserve-recording set-up part 60, and the mode selection window display 80 is shown [[up]] in the monitor 40, allowing the user to determine whether to continuously use the computer or to maintain the computer in suspension (S200). Step S210 is performed after step S200[[,]] in [[rder]] order to determine whether the mode is the power saving mode. Where the mode selection

window display 80 is not used because of the user's need for sleep or rest, etc., the power saving mode is automatically selected, and [[the]] step S50 is accordingly conducted. Conversely, where the power mode can be selected through the mode selection window display 80, ~~it is determined~~ a determination as to whether or not the power saving mode is selected ~~or not~~ is made, and [[the]] step S90 or step S50 is conducted depending upon the determination (S210).

[0053] Where it is determined through [[the]] step S100 that the system is turned on by the user, [[the]] step S150 is ~~then conducted~~ executed. In [[the]] step S150, the identification window display 63 for identifying the reserve-recording conditions within the reserve-recording set-up part 60 is displayed as seen in Fig. 4, allowing the user to change, withdraw or approve the reserve-recording conditions. Where the reserve-recording conditions are approved in [[the]] step S160 or [[they]] are changed in [[the]] step S170, [[the]] step S180 is then ~~conducted~~ executed. Where the reserve-recording conditions are withdrawn, [[the]] step S90 is ~~conducted~~ carried out. Where the reserve-recording conditions are not identified for a predetermined period of time after the identification window display 63 is shown [[up]], although this situation is not shown in the figures, the reserve-recording conditions are automatically approved and subsequently [[the]] step S180 is ~~conducted~~ carried out, to activate the record-controlling part 50.

[0054] In the preferred embodiments described above, the television signals received through the television receiver part 30 are converted into digital files, such as MPEG files

or AVI files, for example, and they are saved in the hard disk drive 50. However, the objects of the present invention may be achieved even if they are saved in a compact disk drive (not shown), or a recordable digital versatile disk (DVD) drive (not shown), or other form of storage device.

[0055] As described above, the computer system and the method for storing television signals therein, according to the present invention, ~~allows~~ allow the computer system to be automatically turned on for reserve-recording of a television program and to be automatically turned off after the reserve-recording is finished, thereby minimizing [[a]] power consumption due to the reserve-recording.

[0056] While the present invention has been illustrated by the description of embodiments thereof, and while the embodiments have been described in considerable detail, it is not the intention of the ~~applicant~~ inventor to restrict or in any way limit the scope of the appended claims to such detail. Additional advantages and modifications will readily appear to those skilled in the art. Therefore, the invention in its broader aspects is not limited to the specific details, representative apparatus and method, and illustrative examples shown and described. Accordingly, departures may be made from such details without departing from the spirit or scope of the ~~applicant's~~ general inventive concept.